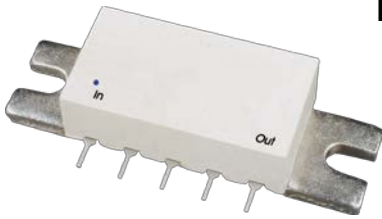


RF/Microwave Amplifier



Features

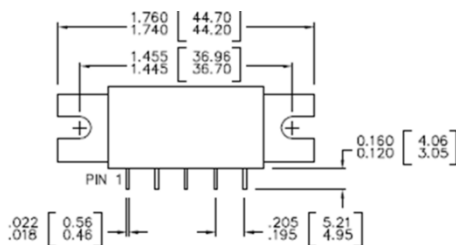
- High Gain: 35.5 dB
- High Output Power: 2 watts
- High Linearity
- Surface-mount Style Design
- EAR99

Technical Specifications

Characteristic	TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency	1 – 200 MHz	1 – 200 MHz
Gain (dB)	35.5	34 Min / 37 Max
Gain Flatness (dB)	+/- 0.5	+/- 1.0 Max
Power @ 1 dB Comp. (dBm)	+33	+31 Min.
3 rd Order Intercept (dBm)	+48	+45 Min
Reverse Isolation (dB)	45	---
VSWR	In	1.5:1
	Out	1.5:1
Noise Figure (dB)	4.5	6.0 Max.
Power	Vdc	+28
	mA	435
		470 Max.

Notes:

- 1) Typical values are measured at 25°C, but not guaranteed.
- 2) Care should always be taken to effectively ground the case of each unit.
- 3) Package outlines drawings below for reference only.
- 4) Maximum operating temperature is defined as that temperature which, if exceeded for extended periods, could result in premature unit failure. This data is provided for user reliability information. This may or may not represent the maximum temperature for electrical parameter specifications.
- 5) Min/Max specifications are guaranteed when tested in a 50 Ohm system.



Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point:	+58 dBm (Typ.)
Second Order Two Tone Intercept Point:	+53 dBm (Typ.)
Third Order Two Tone Intercept Point:	+48 dBm (Typ.)

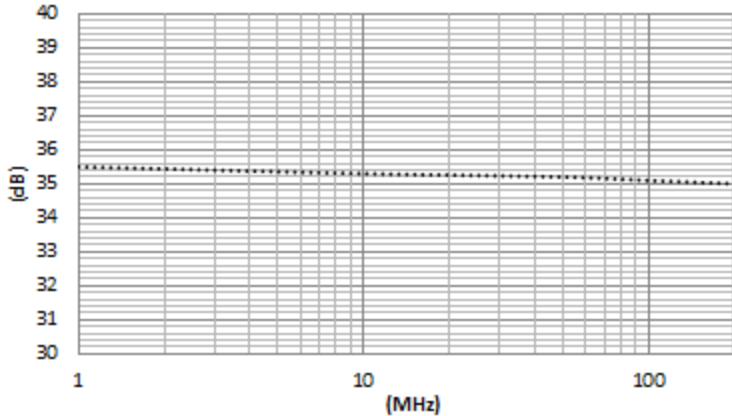
Note: Measured at 100 MHz

Absolute Maximum (No Damage) Ratings

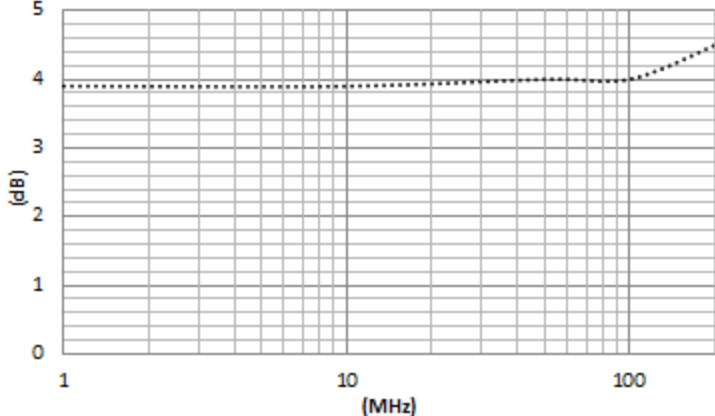
Operating Temperature	-20°C to +90 °C
Storage Temperature	-40°C to +100°C
DC Voltage	+30 Volts
Continuous RF Input Power	+5 dBm
Short Term RF Input Power	100 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.1 Watt (3 μsec Max.)

Typical Performance Graphs

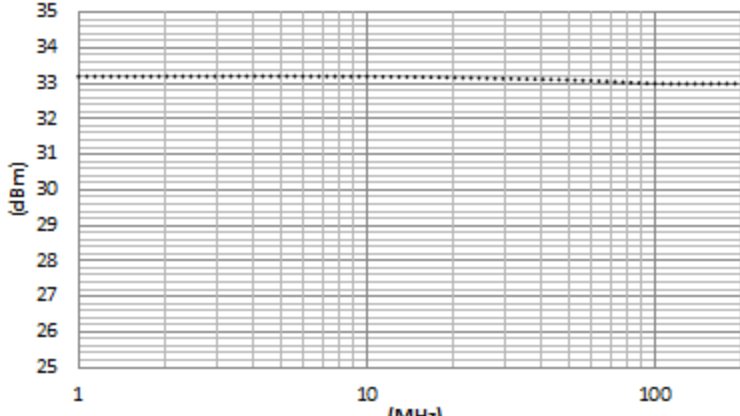
Gain



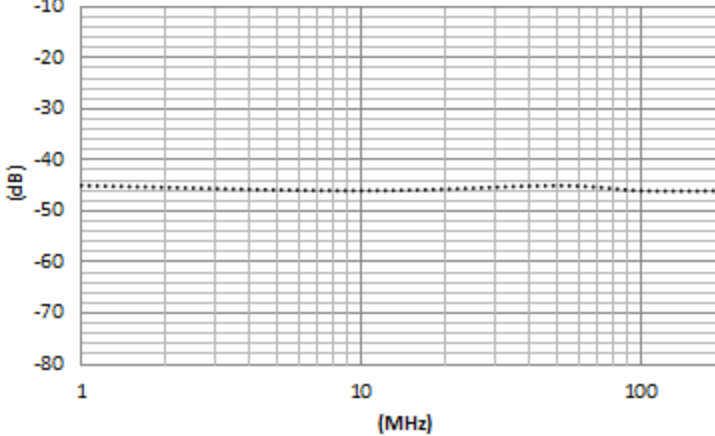
Noise Figure



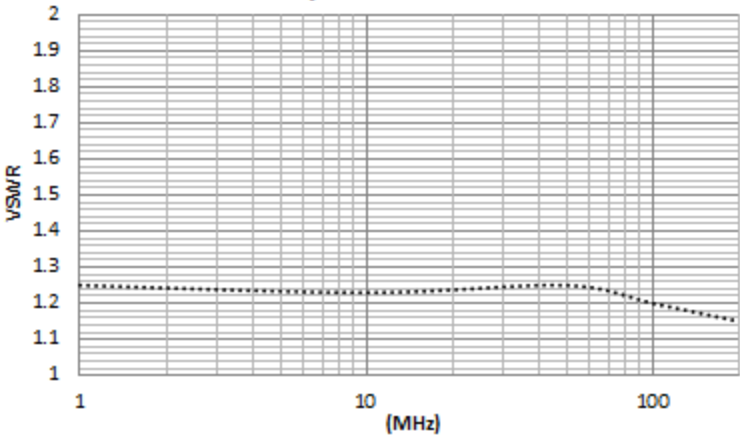
Output Power (1 dB Compression)



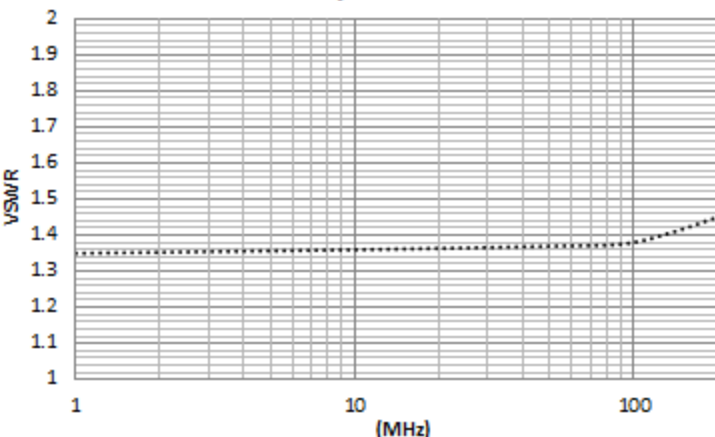
Reverse Isolation



Input VSWR



Output VSWR



Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

